

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method of delivering a therapeutic composition to a target site comprising:

~~delivering the~~ delivering a therapeutic composition comprising an oligonucleotide covalently attached to a light activated drug ~~genetic material~~ through a catheter to the target site; and

delivering ultrasound energy to the target site,

wherein the catheter has an elongated catheter body with at least one axial lumen for delivery of the therapeutic compound ~~genetic material~~ therethrough, the catheter comprising at least one ultrasound transducer coupled to an energy source, wherein the at least one ultrasound transducer generates a sufficient-level of ultrasound energy that is sufficient to cause the ultrasound energy to penetrate tissue at the target site;

wherein the target site comprises a DNA or RNA; and

wherein the oligonucleotide is complementary to the DNA or RNA of the target site.

Claim 2–3 (cancelled).

Claim 4 (currently amended): The method of claim 1, wherein the ~~genetic material~~ oligonucleotide is synthetic.

Claim 5 (currently amended): The method of claim 1, wherein the ~~genetic material~~ oligonucleotide is recombinant.

Claim 6 (original): The method of claim 1, wherein the therapeutic composition further comprises a microbubble.

Claim 7–8 (cancelled).

Claim 9 (currently amended): The method of ~~claim 8~~, claim 1, wherein the oligonucleotide has an affinity for a DNA in the target site.

Claim 10 (original): The method of claim 9, wherein the DNA is a viral DNA.

Claim 11 (original): The method of claim 9, wherein the DNA is an oncogene DNA.

Claim 12 (original): The method of claim 9, wherein the oligonucleotide is an antisense oligonucleotide.

Claim 13 (cancelled).

Claim 14 (currently amended): A therapeutic composition comprising a light activated drug ~~in combination with~~ covalently bonded to a nucleic acid.

Claim 15 (currently amended): The method of claim 1, further comprising at least one support member that supports the at least one ultrasound transducer in a position about a circumference of the elongated catheter body, thereby defining ~~wherein the at least one ultrasound assembly is positioned about a circumference of the elongated catheter body, the at least one support member supporting the at least one ultrasound transducer so as to define a chamber between the at least one~~ ultrasound transducer and the ~~outer~~ circumference of the elongated catheter body.

Claim 16 (original): The method of claim 15, wherein the chamber is filled with a media that absorbs ultrasound energy such that a transmission of ultrasound energy from the ultrasound transducer to the elongated catheter body is reduced.

Claim 17 (original): The method of claim 16, wherein the media is a gas selected from the group consisting of helium, argon, air and nitrogen.

Claim 18 (original): The method of claim 16, wherein the media is a solid media selected from the group consisting of silicon and rubber.

Claim 19 (original): The method of claim 15, wherein the chamber is evacuated using a negative pressure.

Claim 20 (currently amended): The method of claim 1, wherein the catheter further comprises:

a balloon positioned about a circumference ~~the circumference~~ of the elongated catheter body;

at least one media delivery port in fluid communication with the at least one axial lumen for delivery of an expansion media to expand the balloon; and

at least one media delivery port in fluid communication with the at least one axial lumen for delivery of a medicament.

Claim 21 (currently amended): The method of claim 20, wherein the balloon is positioned about the at least one ultrasound transducer assembly.

Claim 22 (currently amended): The method of claim 20, wherein the balloon is positioned about the circumference of the elongated catheter body adjacent to the ultrasound transducer assembly.

Claim 23 (original): The method of claim 1, wherein the ultrasound transducer is configured to deliver ultrasound energy of approximately 0.3 W/cm^2 at a frequency of approximately 1.3 MHz.

Claim 24 (currently amended): The method of claim 20, wherein the balloon comprises a selectively permeable membrane ~~pressure is used to drive the media across the balloon.~~

Claim 25 (original): The method of claim 6, wherein the microbubble comprises a lipid substrate.

Claim 26 (original): The method of claim 25, wherein the lipid substrate comprises a liposome.

Claim 27 (currently amended): The method of claim 6, wherein an interior ~~the interior of the microbubble~~ includes a gas.